

# MERS-CoV Outbreak In Korea

The World Health Organization is reporting an outbreak of Middle Eastern Respiratory Syndrome caused by the Corona Virus, otherwise known as MERS-CoV.

On May 20<sup>th</sup>, a case of MERS was confirmed in South Korea. The index patient had recently traveled to the Middle East including Qatar, UAE and Bahrain. The patient had sought treatment in Korea for influenza type symptoms at multiple healthcare locations and eventually diagnosed with the virus. There have been an additional 29 cases of MERS confirmed by laboratory diagnosis of which two have died. Most of the patients had close contact with the index patient including healthcare workers, other patients in the hospital and family members.

One person diagnosed with MERS traveled to Hong Kong and then to China while symptomatic, defying travel restriction orders. This person is currently in quarantine in China.

This is the largest outbreak of MERS-CoV outside of the Middle East.

To date there have been 1,179 laboratory-confirmed cases of MERS-CoV since 2012 along with 442 deaths.

For more information see the WHO website: <a href="http://www.who.int/csr/disease/coronavirus\_infections/risk-assessment-3june2015/en/">http://www.who.int/csr/disease/coronavirus\_infections/risk-assessment-3june2015/en/</a>

# What Should EMS Do?

## EMS agencies should institute protective measures including:

- 1. EMS providers should be made aware of the symptoms of MERS-CoV and ask patients that present with a fever and respiratory distress whether they have traveled to the Middle East or the Republic of Korea recently, or have been around anyone who has traveled to the Middle East and is now sick with a respiratory disease.
- Practice good contact and respiratory isolation procedures. As with any
  infectious disease that can potentially be transmitted by air, EMS workers should
  use appropriate PPE including gloves and a mask, preferably an M95. If an M95
  is not available, then a simple face mask should be used.
- 3. If a patient is suspected of having MERS-CoV, make sure to alert the receiving hospital so appropriate isolation procedures can be provided including a negative pressure isolation room.
- 4. Make sure to decontaminate any equipment used on a suspected case of MERS-CoV.
- 5. Report any suspected cases of MERS-CoV to the local health department.

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6. EMS agencies should be aware of any increase in volume of respiratory complaints within their service area and report any anomalies to the local public health department.

For more information specific to Healthcare Professionals see the CDC website: http://www.cdc.gov/coronavirus/mers/hcp.html

\*The above information is provided by FirstWatch specific to EMS teams. For more information on MERS-CoV, please see the background information below.

# **Background**

MERS-CoV is a Corona virus, which is in the same family of viruses that causes the common cold as well as more deadly strains such as the SARS virus from 2003.

The epicenter for the MERS outbreak is Saudi Arabia, however, cases have now been reported in 25 countries including Europe and the United States.

Though a very lethal virus, most experts believe MERS-CoV is difficult to transmit from person to person and usually occurring with close contacts with infected persons. Because of this, healthcare workers taking care of patients with MERS-CoV have reported a significant number of infections.

The virus can survive on surfaces, and might spread when people touch something contaminated. The virus has spread many times in hospitals, dialysis centers and other healthcare facilities making infection control critical to preventing the spread.

There is no vaccine for MERS-CoV.

# What to Look for in a Patient with MERS-CoV

The Case Definition, called the "Patient Under Investigation" for MERS-CoV, produced by the CDC defines the characteristics to be aware of when taking care of patients with respiratory complaints. It is listed here.

http://www.cdc.gov/coronavirus/mers/case-def.html

Patient Under Investigation (PUI)

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## Severe Illness

**Fever** *and* **pneumonia** or acute respiratory distress syndrome (based on clinical or radiological evidence)

# AND

A history of travel from countries in or near the **Arabian Peninsula within 14 days** before symptom onset, *or* close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within **14 days** after traveling from countries in or near the Arabian Peninsula

#### OR

A history of being in a healthcare facility (as a patient, worker, or visitor) in the **Republic** of Korea within 14 days before symptom onset

#### OR

A member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) of unknown etiology in which MERS-CoV is being evaluated, in consultation with state and local health departments in the US

## Milder Illness

Fever **and** symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath)

### AND

A history of being in a healthcare facility (as a patient, worker, or visitor) within **14 days** before symptom onset **in a country or territory in or near the Arabian Peninsula** in which recent healthcare-associated cases of MERS have been identified

#### OR

Fever **or** symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath)

## AND

Close contact with a confirmed MERS case while the case was ill

More information about protective measures can be found at the CDC website <a href="http://www.cdc.gov/coronavirus/mers/interim-guidance.html">http://www.cdc.gov/coronavirus/mers/interim-guidance.html</a>

This posting will be updated as more information becomes available.

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